What is claimed is:

1. A composition comprising a somatostatin analog of the formula:

(A – B)

wherein:

A is cysteine, or a peptide chain comprising one or more cysteine residues, which is suitable for binding to a drug or chelator via a thiol linkage; and

B is a naturally occurring or synthetic somatostatin peptide, or fragment thereof, that binds to a somatostatin receptor.

2. The composition of claim 1, wherein A comprises the peptide sequence of any one of SEQ ID NOs:1-3, or wherein A is a single cysteine residue.

3. The composition of claim 1, wherein B comprises SEQ ID NO:4.

4. The composition of claim 1, wherein the somatostatin analog comprises a peptide of any one of SEQ ID NOs:5-7.

5. The composition of claim 1, further comprising a drug, or chelator suitable for binding a drug, wherein the drug or chelator is bound to the one or more cysteines by a thiol linkage.

6. The composition of claim 5, wherein the drug is a therapeutic agent or a detectable label.

7. The composition of claim 6, wherein the therapeutic agent is a radioisotope, a cytotoxin, an immunostimulatory agent, an anti-angiogenic agent, a therapeutic gene, or a chemotherapeutic agent.

8. The composition of claim 5, wherein the chelator is a maleimido derivative of DTPA or a maleimido derivative of a DTPA analog.

9. The composition of claim 1, further comprising a somatostatin analog that specifically binds to mammalian SSTR-positive cells *in vivo*.

10. The composition of claim 1, wherein the SSTR-positive cells are human cancer cells.

11. A method for detecting SSTR-positive cells in a mammalian subject comprising:

(a) administering to the subject a composition comprising a somatostatin analog of the formula:

(A – B)

wherein:

A is cysteine, or a peptide chain comprising one or more cysteine residues, wherein a detectable label is bound to the one or more cysteine residues via a thiol linkage; and

B is a naturally occurring or synthetic somatostatin peptide, or fragment thereof, which binds to a somatostatin receptor; and

(b) detecting the detectable label, whereby SSTR-positive cells are detected.

12. The method of claim 11, wherein A comprises the peptide sequence of any one of SEQ ID NOs:1-3, or wherein A is a single cysteine residue.

13. The method of claim 11, wherein B comprises SEQ ID NO:4.

14. The method of claim 11, wherein the somatostatin analog comprises a peptide of any one of SEQ ID NOs:5-7.

15. A method for treating an SSTR-associated disorder in a mammalian subject, the method comprising administering to the subject a composition comprising a somatostatin analog of the formula:

(A – B)

wherein:

A is cysteine, or a peptide chain comprising one or more cysteine residues, wherein a therapeutic agent is bound to the one or more cysteine residues via a thiol linkage; and

B is a naturally occurring or synthetic somatostatin peptide, or fragment thereof, which binds to a somatostatin receptor; and

whereby a SSTR-associated disorder is treated.

16. The method of claim 15, wherein A comprises the peptide sequence of any one of SEQ ID NOs:1-3, or wherein A is a single cysteine residue.

17. The method of claim 15, wherein B comprises SEQ ID NO:4.

18. The method of claim 15, wherein the somatostatin analog comprises a peptide of any one of SEQ ID NOs:5-7.

19. The method of claim 15, wherein the therapeutic agent is selected from the group consisting of a radioisotope, a cytotoxin, an immunostimulatory agent, an anti-angiogenic agent, a therapeutic gene, and a chemotherapeutic agent.

20. The method of claim 15, wherein the SSTR-associated disorder is cancer.